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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,335	05/24/2006	Masaaki Takegami	4633-0170PUS1	5568
2292 7590 02/02/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
COX, ALEXIS K				
ART UNIT		PAPER NUMBER		
3744				
NOTIFICATION DATE		DELIVERY MODE		
02/02/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/580,335

Applicant(s)

TAKEGAMI ET AL.

Examiner

ALEXIS K. COX

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CI/CD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 5/02/2007, 5/24/2006

DETAILED ACTION

Election/Restrictions

1. Claims 2-4 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/12/2009.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Tanimoto et al (US Patent Application No. 2003/0226370).
4. Regarding claim 1, Tanimoto et al discloses a refrigeration system (1, see paragraph [0031]) for a vapor compression refrigeration cycle including a heat source circuit (2, see paragraph [0031]) provided with a high temperature compressor (11, see paragraph [0032]) and a utilization circuit (3, see paragraph [0031]) connected to the heat source circuit and provided with an evaporator (56, see paragraph [0041]) and a low temperature compressor (55, see paragraph [0041]), the refrigeration system inherently comprising an operation control means for switching the high temperature compressor between an actuated state and suspended state and an actuation control means for actuating the low temperature compressor, based on a refrigerant suction

pressure, as the system of Tanimoto et al is explicitly disclosed to switch between suspended and actuated or operating states based on pressure (40, 83, see paragraph [0032]; 55, see paragraph [0051]) and cannot change operation states of the various compressors without some operation or actuation control means.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sunderland (US Patent Application Publication No. 2007/0240440) discloses a multi-compressor system in which each compressor affects the suction pressure of the others, as does Shaw (US Patent No. 4,787,211). Alsenz (US Patent No. 5,079,929) discloses a multi-stage refrigeration apparatus and method in which one compressor maintains the lower pressure of an associated pair of evaporators while boosting the intake suction pressure of another compressor which also accepts refrigerant more directly from a higher pressure pair of evaporators. Trieskey (US Patent No. 6,460,355) discloses a refrigeration system with multiple compressors indirectly altering relative suction pressure. Petrowski et al (US Patent Application Publication No. 2005/0126219) discloses a refrigeration system with a distinct set of evaporators for each of multiple compressors. Kemler (US Patent No. 2,463,881) discloses a heat pump with a multi-stage compressor and evaporators. McFarlan (US Patent No. 2,796,743) discloses a plural air conditioning system with three compressors, where each compressor partially feeds into the next. Gauberthier et al (US Patent NO. 4,251,247) discloses a cooling system with multiple compressors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXIS K. COX whose telephone number is (571)270-5530. The examiner can normally be reached on Monday through Thursday 8:00a.m. to 5:30p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler or Frantz Jules can be reached on 571-272-4834 or 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AKC/

/Frantz F. Jules/
Supervisory Patent Examiner, Art Unit 3744